IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Glenna G. Mayo, et al.	Examiner: S. R. Pannala
Serial No.:	10/811,259	Group Art Unit: 2164
Filed:	March 26, 2004	Docket No.: 200310943-1
Title:	Access Point that Monitors Guest Usage	

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

    This Appeal Brief is filed in response to the Final Office Action mailed June 2, 2008 and Notice of Appeal mailed November 2, 2008.

AUTHORIZATION TO DEBIT ACCOUNT

    It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1 – 29 stand finally rejected. The rejection of claims 1 – 29 is appealed.

IV. STATUS OF AMENDMENTS

No amendments were made after receipt of the Final Office Action. All amendments have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element or that these are the sole sources in the specification supporting the claim features.

The section entitled "Brief Summary" provides a summary in the following two paragraphs:

An access point includes an interface that permits one or more guests to obtain Internet access. The access point includes monitoring logic that determines the usage of each guest. The guest usage is used to locally cache information that may be of interest to guests of the access point (see specification at paragraph [0005]).

According to another embodiment, a method of providing guests with Internet service comprises detecting a request for Internet access from a guest and monitoring usage patterns of that guest. The method further includes predicting information that may be of interest to the guest based on the guest's usage patterns, and caching the information of interest in a local memory (see specification at paragraph [0006]).

Claim 1

An access point (FIG. 1, #100), comprising:

a web server interface (FIG. 1, #150) that couples one or more guests (FIG. 1, #75) to the Internet (paragraphs [0022] – [0024]);

a usage collector application (FIG. 1, #120) that monitors usage of all of said guests (paragraphs [0029] – [0031]); and

web cache software (FIG. 1, #110) that caches web pages that are of interest to one or more guests in a local memory (FIG. 1, #160) of the access point (paragraphs [0032] – [0034]), wherein the access point is a single device that links the one or more guests on personal computers to a broadband or telephone connector from which Internet access is

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obtained for the personal computers (paragraphs [0013], [0016], [0017], [0019], [0021]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

Claim 2

The access point of claim 1, wherein the web cache software predicts web pages that are of interest to a guest based on that guest's usage pattern, and caches those pages in local memory (The web cache application 110 may also proactively cache web sites or other items that the web cache predicts a guest (or guests) may want, based on usage patterns that the web cache 100 has obtained from usage collector 120 regarding a particular guest or guests. As an example, if a Guest is selecting web sites relating to auto repair topics, the web cache application may proactively cache (on local memory 160) certain web sites relating to auto repair that are commonly visited by users seeking auto repair information. See paragraph [0032] on p. 10.).

Claim 4

The access point of claim 1, further comprising a diagnostic application (Fig. 1, #130) that identifies a cause for an increase in access time to retrieve a web site, and a management application (Fig. 1, #140) that downloads a patch to the access point to correct the increase in access time to retrieve the web site (The diagnostics application 130 then may be executed to determine what the cause was for the drop in performance. The identification of this problem then may trigger the management application 140 to seek a download or patch to correct the problem: see paragraph [0031] on p. 9).

Claim 6

The access point of claim 1, further comprising a local monitor (Fig. 1, #170) that collects usage information from the usage collector application and generates a summary page of system status information and errors detected since the access point was last accessed by a remote server (The local monitor provides a summary page of system

status information, and highlights any errors or problems detected since the last Remote

server access: see paragraph [0028] on p. 8).

Claim 12

     A method of providing guests with Internet service (paragraph [0006]),

comprising:

     detecting at an access point (FIG. 1, #100) a request for Internet access from a

guest on a personal computing device (FIG. 1, #75: paragraphs [0016] – [0017]);

     monitoring at the access point (FIG. 1, #120) usage patterns of the guest

(paragraphs [0029] – [0031]);

     predicting information that is of interest for the guest based on the guest's usage

patterns (paragraphs [0032] – [0034]); and

     locally caching (FIG. 1, #110/160) in the access point the information that is of

interest to the guest, prior to the time that the guest requests the information (paragraphs

[0032] – [0034]), the access point being a single device that links the guest on the

personal computing device to a broadband or telephone connector from which Internet

access is obtained for the personal computing device (paragraphs [0013], [0016], [0017],

[0019] , [0021]. An access point is defined as a device that operates as a bridge or hub to

link one or more computer systems to a broadband or telephone connector from which

Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

Claim 14

     The method of claim 12, wherein the act of predicting includes proactively

caching web sites that the access point predicts the guest will want based on a topic for

which the guest previously selected web sites (The web cache application 110 may also

proactively cache web sites or other items that the web cache predicts a guest (or guests)

may want, based on usage patterns that the web cache 100 has obtained from usage

collector 120 regarding a particular guest or guests: see paragraph [0032] on p. 10.).

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Claim 17

A system for remotely managing a plurality of Internet access points (FIG. 2, #100a-100g), comprising:

a plurality of access points (FIG. 2, #100a-100g) that provide Internet access for one or more guests (FIG. 1, #75: paragraphs [0022] – [0024]), each of said access points being a single device (paragraphs [0013], [0016], [0017], [0019] , [0021]) and including a web server interface (FIG. 1, #150) and a usage collector application (FIG. 1, #120), with the usage collector application detecting information relating to guest usage (paragraphs [0029] – [0031]);

a remote management (FIG. 1, #200; FIG. 2, #200) server that couples to said plurality of access points via the Internet, said remote server including a remote monitor (FIGS. 1 and 2, #250) and a database (FIGS. 1 and 2, #225: paragraphs [0034], [0035], [0038] – [0044]);

wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern, wherein the access points link personal computers of the guests to a broadband or telephone connector from which the Internet access is obtained for the personal computers (paragraphs [0038] – [0044]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

Claim 20

The system of claim 17, wherein the software stored in the database and used to detect usage patterns comprises artificial intelligence software (The patterns are analyzed by artificial intelligence: see paragraph [0020] on p. 6).

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Claim 21

The system of claim 20, wherein the artificial intelligence software predicts web pages that are of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests (Usage patterns are submitted to an artificial intelligence engine in an attempt to identify patterns or predict future guest activity: see paragraph [0033] on p. 10.).

Claim 25

An access point (FIG. 1, #100) that permits multiple guests to obtain Internet access, comprising:

means (FIG. 1, #150) in said access point for interfacing said access point with the multiple guests (FIG. 1, #75: paragraphs [0022] – [0024]);

means (FIG. 1, #150) in said access point for coupling the access point to the Internet (paragraphs [0015] – [0017]);

means (FIG. 1, #120) in said access point for monitoring requests made by a guest to collect information on a guest's usage (paragraphs [0029] – [0031]);

means (FIG. 1, #110) for selecting content that is of interest to the guest based on the guest's usage (paragraphs [0032] – [0034]); and

means (FIG. 1, #160) in said access point for locally storing content that is of interest to the user, wherein the access point is a single device that links the multiple guests on personal computing devices to a broadband or telephone connector from which the Internet access is obtained for the personal computing devices (paragraphs [0013], [0016], [0017], [0019] , [0021]. An access point is defined as a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained: see lines 11-14 of paragraph [0013] on p. 3.).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 – 3, 5, 7 – 15, and 17 – 29 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,779,031 (Picher) in view of US application number 2006/0168318 (Twiss).

Claims 4, 6, and 16 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,779,031 (Picher) in view of US application number 2006/0168318 (Twiss) and USPN 6,963,874 (Kasriel).

VII. ARGUMENT

The rejection of claims 1 – 29 is improper, and Applicants respectfully request reversal of these rejections.

The claims do not stand or fall together. Instead, Applicants present separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-heading as required by 37 C.F.R. § 41.37(c)(1)(vii).

Claim Rejections: 35 USC § 103(a)

Claims 1 – 3, 5, 7 – 15, and 17 – 29 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,779,031 (Picher) in view of US application number 2006/0168318 (Twiss). These rejections are traversed.

Overview of Law on Obviousness

The test for determining if a claim is rendered obvious by one or more references for purposes of a rejection under 35 U.S.C. § 103 is set forth in *KSR International Co. v. Teleflex Inc.*, 550 U.S._, 82 USPQ2d 1385 (2007):

> Under §103, the scope and content of the prior art are to be determined;
> differences between the prior art and the claims at issue are to be
> ascertained; and the level of ordinary skill in the pertinent art resolved.
> Against this background the obviousness or nonobviousness of the subject
> matter is determined. Such secondary considerations as commercial
> success, long felt but unsolved needs, failure of others, etc., might be
> utilized to give light to the circumstances surrounding the origin of the
> subject matter sought to be patented. Quoting *Graham v. John Deere Co.
> of Kansas City*, 383 U.S. 1 (1966).

As set forth in MPEP 2143.03, to ascertain the differences between the prior art and the claims at issue, "[a]ll claim limitations must be considered" because "all words in

a claim must be considered in judging the patentability of that claim against the prior art."
In re Wilson, 424 F.2d 1382, 1385.

According to the Examination Guidelines for Determining Obviousness Under 35
U.S.C. 103 in view of *KSR International Co. v. Teleflex Inc.*, Federal Register, Vol. 72,
No. 195, 57526, 57529 (October 10, 2007), once the *Graham* factual inquiries are
resolved, there must be a determination of whether the claimed invention would have
been obvious to one of ordinary skill in the art based on any one of the following proper
rationales:

(A) Combining prior art elements according to known methods to yield
predictable results; (B) Simple substitution of one known element for another to
obtain predictable results; (C) Use of known technique to improve similar devices
(methods, or products) in the same way; (D) Applying a known technique to a
known device (method, or product) ready for improvement to yield predictable
results; (E) "Obvious to try"—choosing from a finite number of identified,
predictable solutions, with a reasonable expectation of success; (F) Known work
in one field of endeavor may prompt variations of it for use in either the same
field or a different one based on design incentives or other market forces if the
variations would have been predictable to one of ordinary skill in the art; (G)
Some teaching, suggestion, or motivation in the prior art that would have led one
of ordinary skill to modify the prior art reference or to combine prior art reference
teachings to arrive at the claimed invention. *KSR International Co. v. Teleflex
Inc.*, 550 U.S._, 82 USPQ2d 1385 (2007).

Furthermore, as set forth in *KSR International Co. v. Teleflex Inc.*, quoting from
In re Kahn, 441 F.3d 977, 988 (CA Fed. 2006), "[R]ejections on obviousness grounds
cannot be sustained by mere conclusory statements; instead, there must be some
articulated reasonings with some rational underpinning to support the legal conclusion of
obviousness."

Therefore, if the above-identified criteria and rationales are not met, then the cited reference(s) fails to render obvious the claimed invention and, thus, the claimed invention is distinguishable over the cited reference(s).

Scope and Content of Art and Overview of Claims

As a precursor to the arguments, Appellants provide an overview of the claims and the primary references (Picher and Twiss). This overview will assist in determining the scope and content of the prior art as required in Graham (see *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18 setting out an objective analysis for applying 103 rejections).

By way of background, wireless access points are designed to permit multiple computers to conduct wireless transmissions simultaneously, so that a plurality of computer users may access the Internet through the same wireless access point (Appellants' background p. 1, lines 1-3 of paragraph [0003]). Prior access points, however, provide little support to hosts that provide wireless internet to customers.

Picher is directed to a server system having plural servers, routers, etc. that manage user sessions with Simple Network Management Protocol (SNMP) messages. Picher shows a plurality of separate devices that include a database, an event server, a node server, a database server, an RSVP node server, etc. Picher does not teach an access point that is a single device.

Twiss is directed to routing and caching systems that reduce traffic and bandwidth in a decentralized peer-to-peer (P2P) file sharing network. Twiss teaches a gateway node or P2P cache that "caches both network and download traffic and may cache one or both of inbound and outbound traffic (forward and reverse) caching" (see Twiss at paragraph [0065]). Twiss also teaches a separate device (a router) that links personal computers to the Internet.

The claims are generally directed to a single access point that has three elements: (1) a web server interface, (2) a usage collector, and (3) web cache software. This single device links guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers.

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Differences Between the Art and Claims

Each of the independent claims recites one or more elements that are not taught or suggested in Picher in view of Twiss. These missing elements show that the differences between the combined teachings in the art and the recitations in the claims are great. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

These differences are shown below and presented with separate headings for different claim groups.

Sub-Heading: Independent Claims 1, 12, 17, and 25

Claim 1 is selected for discussion.

Claim 1 recites an access point that has three elements: (1) a web server interface, (2) a usage collector, and (3) web cache software. The access point and these three elements are provided "in a single device." This single device "links the one or more guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers. Nowhere does the art of record teach or even suggest a single device that includes the three claim elements.

Figure 2 in Picher shows a plurality of separate devices that include a database 240, an event server 230, a node server 225, a database server 235, an RSVP node server 225, etc. Picher does not teach an access point that is a single device as claimed. Again, Picher teaches a plurality of various servers, databases, etc. Further, Picher does not teach or suggest a single device that links guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers as recited in claim 1.

Figure 4c in Twiss shows a gateway node 408 or P2P cache that "caches both network and download traffic and may cache one or both of inbound and outbound traffic (forward and reverse) caching" (see Twiss at paragraph [0065]). Twiss does not teach or suggest that the gateway node 408 links guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers as recited in claim 1. By contrast, Figure 4c in Twiss shows a separate device (router 414)

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that links personal computers 410 to the Internet 416. This router 414 is a separate device from the gateway node 408 which functions as a P2P cache.

Even assuming *arguendo* that Picher and Twiss are properly combinable (which they are not), this combination fails to teach or suggest a single device that links guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers. Thus, Picher and Twiss, alone or in combination, do not teach or suggest an access point that is a single device having the separate elements that link guests on personal computers to a broadband or telephone connector from which Internet access is obtained for the personal computers.

The differences between the claims and the teachings in the art are great since the references fail to teach or suggest all of the claim elements. As such, the pending claims are not a predictable variation of the art to one of ordinary skill in the art.

For at least these reasons, the claims are allowable over the art of record.

Sub-Heading: Dependent Claim 2

Dependent claim 2 recites that the web cache software in the access point predicts web pages that are of interest to a guest based on that guest's usage pattern, and caches those pages in local memory. The examiner argues that these claim elements are taught in paragraph [0016] of Twiss. Appellants respectfully disagree.

Paragraph [0016] in Twiss discusses a web proxy cache. "This proxy can store (or 'cache') the data it downloads so that if another user requests the same web page that the data can be sent from its local copy." This teaching is quite different than the recitations in claim 2.

Claim 2 recites that the web cache software "predicts" web pages that are of interest to a guest. By contrast, Twiss teaches stores a web page and sends this web page when a users request the same page. No prediction is being performed.

Furthermore, claim 2 recites that the web cache software predicts web pages "based on that guest's usage pattern." Twiss teaches or suggests nothing regarding usage patterns of users. Instead, when a second user requests a same page as first user, this page is sent to the second user.

Further yet, the web cache software of claim 2 is in an access point that provides that links guests on personal computers to the internet. By contrast, the web proxy cache in Twiss is illustrated in the figures as being a server.

Sub-Heading: Dependent Claim 14

Dependent claim 14 recites that the act of predicting includes proactively caching web sites that the access point predicts the guest will want based on a topic for which the guest previously selected web sites. The examiner argues that these claim elements are taught in paragraph [0016] of Twiss. Appellants respectfully disagree.

Paragraph [0016] in Twiss discusses a web proxy cache. "This proxy can store (or 'cache') the data it downloads so that if another user requests the same web page that the data can be sent from its local copy." This teaching is quite different than the recitations in claim 14.

Claim 14 recites "predicting" web sites for the guest. By contrast, Twiss teaches stores a web page and sends this web page when a users request the same page. No prediction is being performed.

Furthermore, claim 14 recites caching web sites that "that the access point predicts the guest will want based on a topic for which the guest previously selected web sites." Twiss teaches or suggests nothing caching based on a "topic" that the guest previously selected.

Sub-Heading: Dependent Claim 20

Claim 20 recites that the software stored in the database used to detect usage patterns comprises artificial intelligence software. The examiner argues that this claim element is taught in paragraph [0066] of Twiss. Appellants respectfully disagree.

Paragraph [0066] in Twiss discusses Figs. 4c and 5 and various elements of a gateway node that includes a P2P caching router. This section of Twiss has nothing whatsoever to do with artificial intelligence software.

Sub-Heading: Dependent Claim 21

Claim 21 recites that the artificial intelligence software predicts web pages that are of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests. The examiner argues that these claim elements are taught in paragraph [0067] of Twiss. Appellants respectfully disagree.

Paragraph [0067] in Twiss discusses Figs. 4c and 5 and various elements of a gateway node that includes a P2P caching router. Twiss discusses that ISP router 414 (or router 506) can identify P2P traffic in various ways. This section of Twiss has nothing whatsoever to do with artificial intelligence software. Further, nowhere does this section of Twiss teach or even suggest artificial intelligence software predicts web pages that are of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests.

Factors/Rationale Do Not Support Obviousness

In determining obviousness, neither the particular motivation to make the claimed invention nor the problem the inventor is solving controls. The proper analysis is whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts. Further, although the Supreme Court in KSR cautioned against an overly rigid application of the teaching-suggestion-motivation (TSM) rationale, the Supreme Court recognized that TSM was one of a number of valid rationales that could be used to determine obviousness.

Appellants discuss examples of rationale or factors below to show that there is no finding of obviousness.

As a first factor, Appellants respectfully submit that no teaching or suggestion exists to make the combination because the references are directed to completely different inventions. Picher is directed to a server system having plural servers, routers, etc. that manage user sessions with Simple Network Management Protocol (SNMP) messages. By contrast, Twiss is directed to routing and caching systems that reduce traffic and bandwidth in a decentralized peer-to-peer (P2P) file sharing network.

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As a second factor, Picher and Twiss would have to be greatly modified to arrive at the claimed invention. Picher shows a plurality of separate devices that include a database, an event server, a node server, a database server, an RSVP node server, etc. Picher does not teach an access point that is a single device. Twiss teaches a gateway node that caches network data and a separate router that links personal computers to the internet. No suggestion is provided how these separate elements could be combined into a single access device as claimed.

As a third factor, the differences between the claims and the applied references are great. Examples are discussed above with respect to different claim groups.

As a fourth factor, the Examiner is performing an improper piecemeal construction that uses hindsight to arrive at the claim elements. In other words, the Examiner is picking and choosing unrelated and isolated sentences or teachings from Picher and Twiss with hindsight of Appellants' invention to allegedly obviate the pending claims. One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988).

As a fifth factor, no reasonable expectation of success has been established for modifying Picher with the teachings of Twiss to arrive at the recitations of the claims. Picher and Twiss teach a multitude of different elements (routers, gateways, servers, etc.) across different types of networks. These elements perform different functions. These elements, functioning in different capacities and different network environments, cannot simply be added together and expected to properly function.

As a sixth factor, Appellant argues that no teaching or suggestion exists to make the combination because the references are directed to solving completely different problems. The background in Picher discusses problems associated with gathering and logging SNMP messages. By contrast, the background in Twiss discusses problems associated with peer-to-peer networks.

These various factors show that elements in the claims are not obvious in view of the Picher and Twiss.

Claim Rejections: 35 USC § 103(a)

Claims 4, 6, and 16 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,779,031 (Picher) in view of US application number 2006/0168318 (Twiss) and USPN 6,963,874 (Kasriel). These rejections are traversed.

As explained above, Picher in view of Twiss fail to teach or suggest all of the elements of the independent claims. Kasriel fails to cure these deficiencies. For at least the reasons given with respect to the independent claims, respective dependent claims 4, 6, and 16 are allowable over Picher in view of Twiss and Kasriel.

Sub-Heading: Dependent Claim 4

Dependent claim 4 recites a diagnostic application that identifies a cause for an increase in access time to retrieve a web site, and a management application that downloads a patch to the access point to correct the increase in access time to retrieve the web site. Both the diagnostic application and the management application are in the access point. The examiner argues that these claim elements are taught in Kasriel at column 7, lines 46-51. Appellants respectfully disagree.

The cited section of Kasriel discusses a webmaster that can determine whether delays are caused by slow generation of a web-page or slow transmission of the web-page. The webmaster, however, is not provided in an access point. Further, this section of Kasriel states nothing about downloading a patch to the access point to correct the increase in access time to retrieve the web site.

Sub-Heading: Dependent Claim 6

Dependent claim 6 recites a local monitor that collects usage information from the usage collector application and generates a summary page of system status information and errors detected since the access point was last accessed by a remote server. The examiner argues that these claim elements are taught in Kasriel at column 7, lines 1-4. Appellants respectfully disagree.

The cited section of Kasriel discusses time measures that facilitate assessing performance of a web page. This section of Kasriel states nothing regarding generating a

summary page of system status information and errors detected since the access point
was last accessed by a remote server.

CONCLUSION

In view of the above, Applicants respectfully request the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

Hewlett-Packard Company
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400

Respectfully submitted,

/Philip S. Lyren #40,709/

Philip S. Lyren
Reg. No. 40,709
Ph: 832-236-5529

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VIII. Claims Appendix

1. (previously presented) An access point, comprising:

a web server interface that couples one or more guests to the Internet;

a usage collector application that monitors usage of all of said guests; and

web cache software that caches web pages that are of interest to one or more guests

in a local memory of the access point, wherein the access point is a single device that links

the one or more guests on personal computers to a broadband or telephone connector from

which Internet access is obtained for the personal computers.

2. (previously presented) The access point of claim 1, wherein the web cache software

predicts web pages that are of interest to a guest based on that guest's usage pattern, and

caches those pages in local memory.

3. (original) The access point of claim 2, wherein the web cache software initiates a

signal to the guest indicating that the cached pages are available for viewing.

4. (previously presented) The access point of claim 1, further comprising a diagnostic

application that identifies a cause for an increase in access time to retrieve a web site, and

a management application that downloads a patch to the access point to correct the

increase in access time to retrieve the web site.

5. (original) The access point of claim 1, wherein each of said guests includes an identification mechanism which is used by said usage collector to compile usage information specific to each guest.

6. (previously presented) The access point of claim 1, further comprising a local monitor that collects usage information from the usage collector application and generates a summary page of system status information and errors detected since the access point was last accessed by a remote server.

7. (previously presented) The access point of claim 6, wherein the local monitor couples to a remote monitor to provide further analysis of the usage information to the remote monitor.

8. (original) The access point of claim 7, further comprising a diagnostic application that launches when the usage collector detects an abnormality.

9. (original) The access point of claim 8, further comprising a management application that configures the local monitor to provide summary information to the remote monitor.

10. (original) The access point of claim 8 further comprising a management application that requests programs from the remote monitor based on the result of diagnostic application.

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11. (previously presented) The access point of claim 10, wherein the web cache application, diagnostic application, and management application are dynamically modified based on guest usage.

12. (previously presented) A method of providing guests with Internet service, comprising:

    detecting at an access point a request for Internet access from a guest on a personal computing device;

    monitoring at the access point usage patterns of the guest;

    predicting information that is of interest for the guest based on the guest's usage patterns; and

    locally caching in the access point the information that is of interest to the guest, prior to the time that the guest requests the information, the access point being a single device that links the guest on the personal computing device to a broadband or telephone connector from which Internet access is obtained for the personal computing device.

13. (original) The method of claim 12, further comprising transmitting information relating to the guest's usage patterns to a remote server, and analyzing the guest's usage patterns at the remote server using artificial intelligence software, and correlating the guest's usage patterns with previously detected usage patterns to predict future usage patterns of the guest.

14. (previously presented) The method of claim 12, wherein the act of predicting includes proactively caching web sites that the access point predicts the guest will want based on a topic for which the guest previously selected web sites.

15. (original) The method of claim 12, wherein the act of predicting includes considering usage patterns of other guests.

16. (previously presented) The method of claim 12, further comprising identifying an error or sub-optimal condition in the access point and automatically downloading a patch to fix the error or the sub-optimal condition.

17. (previously presented) A system for remotely managing a plurality of Internet access points, comprising:

a plurality of access points that provide Internet access for one or more guests, each of said access points being a single device and including a web server interface and a usage collector application, with the usage collector application detecting information relating to guest usage;

a remote management server that couples to said plurality of access points via the Internet, said remote server including a remote monitor and a database;

wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance

the operation of the access point based on the detected usage pattern, wherein the access

points link personal computers of the guests to a broadband or telephone connector from

which the Internet access is obtained for the personal computers.

18. (original) The system of claim 17, wherein the usage collector application also detects

information relating to system usage, and said information relating to system usage also

is transferred to the remote management server for analysis.

19. (original) The system of claim 17, wherein at least one of the access points is a

wireless access point that couples to the one or more guests via a wireless transmission

medium.

20. (original) The system of claim 17, wherein the software stored in the database and

used to detect usage patterns comprises artificial intelligence software.

21. (previously presented) The system of claim 20, wherein the artificial intelligence

software predicts web pages that are of interest to guests based on usage patterns, and the

access points include a web cache application for locally caching web pages predicted to

be of interest to guests.

22. (original) The system of claim 20, wherein the artificial intelligence software detects improper activity based on usage patterns, and provides instructions to an access point to take corrective action to minimize the effect of the improper activity.

23. (original) The system of claim 17, wherein the access points include a diagnostic application that analyzes the access points to detect possible errors.

24. (previously presented) The system of claim 23, wherein the diagnostic software signals the remote monitor to download a program to an access point to assist in resolving a detected error condition.

25. (previously presented) An access point that permits multiple guests to obtain Internet access, comprising:

means in said access point for interfacing said access point with the multiple guests;

means in said access point for coupling the access point to the Internet;

means in said access point for monitoring requests made by a guest to collect information on a guest's usage;

means for selecting content that is of interest to the guest based on the guest's usage; and

means in said access point for locally storing content that is of interest to the user, wherein the access point is a single device that links the multiple guests on personal

computing devices to a broadband or telephone connector from which the Internet access

is obtained for the personal computing devices.

26. (previously presented) The access point of claim 25, wherein the means for

monitoring requests also monitors operational parameters related to said access point.

27. (previously presented) The access point of claim 25, further comprising means for

diagnosing malfunctions of said access point.

28. (previously presented) The access point of claim 26, further comprising means for

managing said access point.

29. (previously presented) The access point of claim 28, wherein the selecting means,

diagnosing means, and managing means are dynamically modified based on the guest's

usage detected by said monitoring means.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.